

ABSTRACT

A system for measuring the irradiance of a fluorescently labeled particle having a cytometric flow chamber; a plurality of excitation light sources; a plurality of scatter detectors, each configured to detect light from only one of the plurality of excitation light sources and arranged so as to detect scattered light from the particle; a trigger connected to the plurality of scatter detectors, the trigger emitting a signal when scattered light incident on one of the scatter detectors is exceeding a predetermined threshold value; collection optics; at least one fluorescence detector to receive emissions collected by the collection optics and generate an output, the at least one fluorescence detector being configured to respond only to a discrete number of wavelength bands; and an integrator for recording the output of the at least one fluorescence detector in response to a signal from the trigger.